IN THE CLAIMS

—47. (Previously presented) A circuit including a compensation branch for reducing second order non-linear distortion in a receiver caused by jammers during direct down conversion of a received RF signal by the receiver, the compensation branch being adapted to be coupled to the receiver to reproduce the second order nonlinear distortion in the receiver and including:

a gain stage for generating the reproduced second order nonlinear distortion; and

an output coupling circuit for coupling the reproduced second order nonlinear distortion to an output of the receiver to generate a down-converted baseband signal characterized with reduced second order nonlinear distortion.

48. (Currently Amended) The circuit of claim 47, wherein the compensation ~~path~~ **branch** includes a squaring circuit.

49. (Previously presented) The circuit of claim 47, wherein the receiver is a Zero-IF direct down conversion receiver.

50. (Previously presented) The circuit of claim 47, wherein the receiver is a low IF direct down conversion receiver.

51. (Previously presented) The circuit of claim 47, wherein the output coupling circuit is an adder.

52. (Currently Amended) The circuit of claim 47, whereby the receiver includes a mixer, and wherein the gain stage receives a signal from the mixer having an amplitude which is representative of the second-order **non**linear distortion in the receiver.

53. (Currently Amended) The circuit of claim 48, whereby the receiver includes a mixer, and wherein the gain stage receives a signal from the mixer having an amplitude which is representative of the second-order **non**linear distortion in the receiver.

54. (Currently Amended) The circuit of claim 49, whereby the receiver includes a mixer, and wherein the gain stage receives a signal from the mixer having an amplitude which is representative of the second-order **non**linear distortion in the receiver.

55. (Currently Amended) The circuit of claim 50, whereby the receiver includes a mixer, and wherein the gain stage receives a signal from the mixer having an amplitude which is representative of the second-order **non**linear distortion in the receiver.

56. (Currently Amended) The circuit of claim 51, whereby the receiver includes a mixer, and wherein the gain stage receives a signal from the mixer having an amplitude which is representative of the second-order **non**linear distortion in the receiver.

57. (Currently Amended) The circuit of claim 4[6]7, wherein the receiver defines a receiver path and the compensation ~~path~~ **branch** operates to provide feed forward second-order non-linear distortion reduction to the receiver path.

58. (Currently Amended) The circuit of claim 52, wherein the receiver defines a receiver path and the compensation ~~path~~ **branch** operates to provide feed forward second-order non-linear distortion reduction to the receiver path.

59. (Currently Amended) The circuit of claim 53, wherein the receiver defines a receiver path and the compensation ~~path~~ **branch** operates to provide feed forward second-order non-linear distortion reduction to the receiver path.

60. (Previously presented) The circuit of claim 54, whereby the non-linear distortion elimination does not introduce other non-linear distortion in the receiver path.

61. (Currently Amended) The circuit of claim 55, wherein the receiver defines a receiver path and the compensation ~~path~~ **branch** operates to provide feed forward second-order non-linear distortion reduction to the receiver path.

62. (Previously presented)The circuit of claim 55, whereby the non-linear distortion elimination does not introduce other non-linear distortion in the receiver path.

63. (Previously presented) The circuit of claim 47, further comprising means for adjusting the gain stage to permit calibration thereof.

64. (Previously presented) The circuit of claim 63, wherein the means for adjusting enables factory calibration of a mobile device including the circuit and the receiver.

65. (Previously presented) The circuit of claim 63, wherein the means for adjusting includes circuitry for providing self-contained auto-calibration.

66. (Previously presented) The circuit of claim 49, further comprising means for adjusting the gain stage to permit calibration thereof.

67. (Previously presented) The circuit of claim 66, wherein the means for adjusting enables factory calibration of a mobile device including the circuit and the receiver.

68. (Previously presented) The circuit of claim 66, wherein the means for adjusting includes circuitry for providing self-contained auto-calibration.

69. (Previously presented) The circuit of claim 50, further comprising means for adjusting the gain stage to permit calibration thereof.

70. (Previously presented) The circuit of claim 69, wherein the means for adjusting enables factory calibration of a mobile device including the circuit and the receiver.

71. (Previously presented) The circuit of claim 69, wherein the means for adjusting includes circuitry for providing self-contained auto-calibration.

72. (Previously presented) The circuit of claim 47, wherein the circuit and receiver are on a single integrated circuit.

73. (Previously presented) The circuit of claim 72, wherein the integrated circuit is adapted to be coupled to a mobile station modem (MSM) for signal processing of the down-converted baseband signal.

74. (Previously presented) The circuit of claim 73, wherein the integrated circuit and MSM are further adapted to be used with a transmitter, the integrated circuit being responsive to a test signal generated under MSM control to provide calibration.

75. (Previously presented) The circuit of claim 49, wherein the circuit and receiver are on a single integrated circuit.

76. (Previously presented) The circuit of claim 75, wherein the integrated circuit is adapted to be coupled to a mobile station modem (MSM) for signal processing of the down-converted baseband signal.

77. (Previously presented) The circuit of claim 76, wherein the integrated circuit and MSM are further adapted to be used with a transmitter, the integrated circuit being responsive to a test signal generated under MSM control to provide calibration.

78. (Previously presented) The circuit of claim 50, wherein the circuit and receiver are on a single integrated circuit.

79. (Previously presented) The circuit of claim 78, wherein the integrated circuit is adapted to be coupled to a mobile station modem (MSM) for signal processing of the down-converted baseband signal.

80. (Previously presented) The circuit of claim 79, wherein the integrated circuit and MSM are further adapted to be used with a transmitter, the integrated circuit being responsive to a test signal generated under MSM control to provide calibration.

81. (Previously presented) An integrated circuit having a receiver and a distortion reduction circuit for reducing second order non-linear distortion in a receiver caused by jammers during direct down conversion of a received RF signal by the receiver, the distortion reduction circuit including a compensation branch coupled to the receiver to reproduce the second order nonlinear distortion in the receiver, the compensation branch including:

a gain stage for generating the reproduced second order nonlinear distortion; and

an output coupling circuit for coupling the reproduced second order nonlinear distortion to an output of the receiver to generate a down-converted baseband signal characterized with reduced second order nonlinear distortion.

82. (Previously presented) The integrated circuit of claim 81, wherein the receiver is one of a Zero-IF and a low IF direct down conversion receiver.

83. (Previously presented) The integrated circuit of claim 82, further including means for adjusting the gain stage to permit calibration thereof.

84. (Previously presented) The integrated circuit of claim 83, wherein the means for adjusting enables factory calibration of a mobile device including the circuit and the receiver.

85. (Previously presented) The circuit of claim 83, wherein the means for adjusting includes circuitry for providing self-contained auto-calibration.

86. (Previously presented) A circuit for reducing second order non-linear distortion in a receiver caused by jammers during direct down conversion of a received RF signal by the receiver, the circuit being adapted to be coupled to the receiver in a feed forward manner to remove unwanted second order nonlinear distortion in the receiver, the circuit comprising:

a gain stage for generating the unwanted second order nonlinear distortion; and

an output coupling circuit for subtracting the unwanted second order nonlinear distortion from an output of the receiver to generate a down-converted baseband signal characterized with reduced second order nonlinear distortion.

87. (Previously presented) The circuit of claim 86, wherein the receiver is one of a Zero-IF and a low IF direct down conversion receiver.

88. (Previously presented) The circuit of claim 87, further comprising means for adjusting the gain stage to permit calibration thereof.

89. (Previously presented) The circuit of claim 88, wherein the means for adjusting enables factory calibration of a mobile device including the circuit and the receiver.

90. (Previously presented) The circuit of claim 88, wherein the means for adjusting includes circuitry for providing self-contained auto-calibration.

91. (Previously presented) In a circuit adapted to be coupled to a receiver in a feed forward manner to remove unwanted second order nonlinear distortion in the receiver caused by jammers, a method comprising:

reproducing, by the circuit, the unwanted second order nonlinear distortion; and

subtracting, using a feed forward technique, the unwanted second order nonlinear distortion from an output of the receiver to generate a down-converted baseband signal characterized with reduced second order nonlinear distortion.

92. (Previously presented) The method of claim 91, further comprising calibrating the gain stage.—